

**DEVICE FOR QUICKLY DETACHING AND REASSEMBLING  
THE FRONTMASK OF A COMPUTER CASING  
BACKGROUND OF THE INVENTION**

**(a) Field of the Invention**

5       The invention is a device for quickly detaching and reassembling a frontmask of a computer casing. In a lower part on an inner side of the computer casing a movable device is installed.

**(b) Description of the Prior Art**

10       With prior embodiments of frontmasks one had to use a lot of screws, a screw driver and other tools to assemble the frontmask and the casing of the computer. For detaching the frontmask, every single screw has to be taken out again with the screwdriver.

      Detaching and reassembling a frontmask in this way is very laborious and time-consuming, and impedes an efficient and large scale production.

15                                   **SUMMARY OF THE INVENTION**

      The primary objective of the invention consists of a movable device. When a frontmask is assembled with a casing of a computer, one only has to pull a handle and a beveled surface of a push-heads lifting anchoring elements of the frontmask and wedge-shaped push-heads push the anchoring elements outwards. This allows a practical, simple and quick  
20    detaching of the frontmask. The movable device consists of an anchor, a plurality of sliding clips, two wedge-shaped push-heads, a retraction spring, a handle and some other related parts. The anchor locks in a designated hole in a bottom of the computer casing. The sliding clips, located on both  
25    ends of the movable device, are inserted into the guideway of a slide bar

and can be moved along the slide bar. The two wedge-shaped push-heads are located on an upper side on both ends of the movable device and have a beveled surface.

To detach the frontmask of the casing, one has to pull the handle  
5 whereby the retraction string will be stretched. Due to the beveled surface of the pushheads the anchoring elements of the frontmask get lifted and the holes in the anchoring elements get detached from the hooks of the computer casing. The wedge-shaped push-heads of the movable device push the anchoring elements outwards and the frontmask of the casing can  
10 now be detached thereby allowing a quick, simple and practical detaching of the frontmask of the computer casing.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 shows an exploded view of the upper part of the computer casing and the frontmask according to the invention.

15 FIG. 2 shows an exploded view of the lower part of the computer casing and the frontmask according to the invention.

FIG. 3 is a perspective view of the movable device according to the invention.

FIG. 4 shows a perspective view of the movable device and of the lower  
20 part of the computer casing according to the invention

FIG. 5 shows a perspective view of the lower part, when the frontmask is assembled with the casing according to the invention

FIG. 6 shows a structural view in assembling state according to the invention.

FIG. 7.shows a structural view in assembling state according to the invention.

## **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

5       As shown in FIG. 1, an upper part of a computer casing 1 includes two holes 11, and the corresponding upper part of the frontmask 2 is provided with two hook-shaped clips 21. The hook-shaped clips 21 can be inserted and fixed in the holes 11.

10       The feature of the invention as shown in FIG. 1 and FIG 2, a movable device 3 is installed on the base inside of the computer casing 1. The movable device 3 has a curved shape. Turning to FIG. 4, on one end of the movable device 3 is an anchor 31, which can be inserted and fixated in a hole 12 to the base of the computer casing 1. On both ends of the movable device 3, each on a left and on a right side, a reverse L-shaped sliding clip  
15   32 is mounted. The sliding clips 32 are inserted in a guideway 131 of a slide bar 13 in the base of the computer casing 1. The sliding clips 32 can easily be moved left and right along the slide bar 13. Two wedge-shaped push-heads are located on an upper side on both ends of the movable device 3. On each side, located beneath the wedge-shaped pushheads, is a  
20   beveled surface. The retraction spring 35 is installed on a side surface of the movable device 3. Next to the retraction spring 35, also on the side surface, is an arc-shaped handle 36.

      On each side of a lower part of the computer casing 1 are two hooks 14 and next to the hooks 14 are two support-planks 15. As shown in FIG. 5,

two anchoring elements 22 are installed on each side in the lower part on the inner side of the frontmask 2.

Two square shaped holes 221 in the anchoring elements 22 on are attached together with the hooks 14 of the computer casing 1. The lower  
5 part of the frontmask 2 and the computer casing 1 are fixed together and the two support-planks 15 are enhancing the stability of the anchoring elements 22, which rest on these planks 15. As shown in FIG. 6, to detach the frontmask of the casing 2, one has to pull the handle 36 of the movable  
10 device 3, whereby the retraction spring 35 will be stretched and the beveled surfaces 34 lift the anchoring elements 22 of the frontmask 2. By the holes 221 in the anchoring parts 22 are separated from the hooks 14 of the computer casing 1.

FIG. 7 shows the wedge-shaped push-heads 33 of the movable device 3 pushing the already lifted anchoring elements 22 outwards. The  
15 frontmask 2 can easily be taken off the computer casing 1. By letting go of the handle 36, the retraction spring 35 of the movable device 3 moves back into its original position as shown in FIG. 5.